

FIG. 1

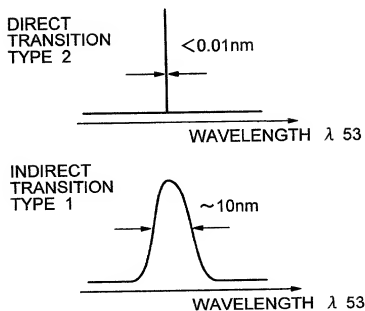


FIG. 2

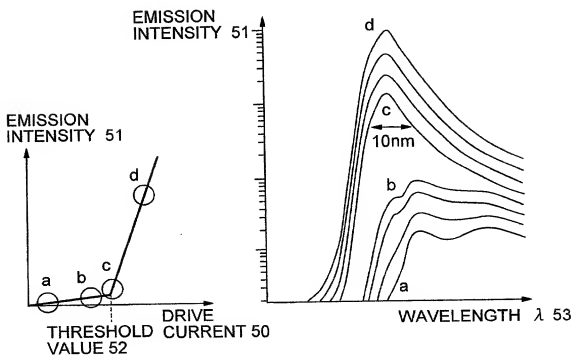


FIG. 3

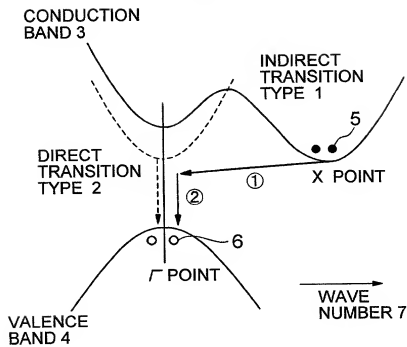


FIG. 4

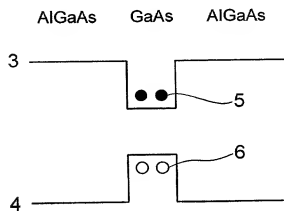


FIG. 5A

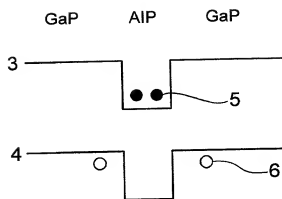


FIG. 5B

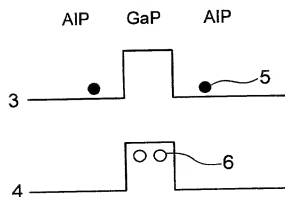
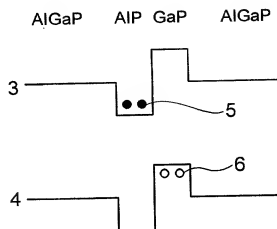


FIG. 6



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FIG. 7

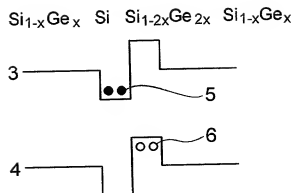


FIG. 8

Be:GaP cap	5nm	
Be:AlGaP graded	1000nm	} BARRIER LAYER 61
AlGaP	150nm	
GaP	0.6nm	} ACTIVE LAYER 60
AlP	2.5nm	
AlGaP	150nm	— BARRIER LAYER 61
GaP buff	50nm	
S:GaP (100) sub.	650°C	— SUBSTRATE 62

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FIG. 9A

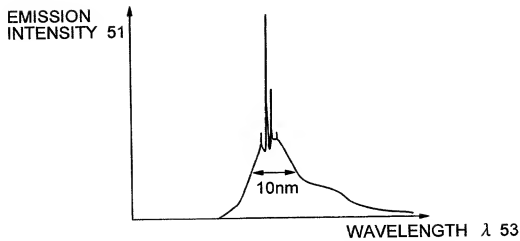


FIG. 9B

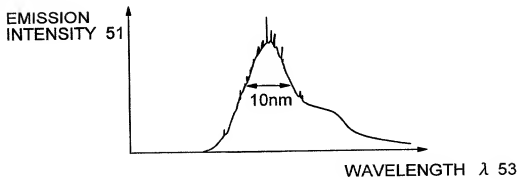


FIG. 10

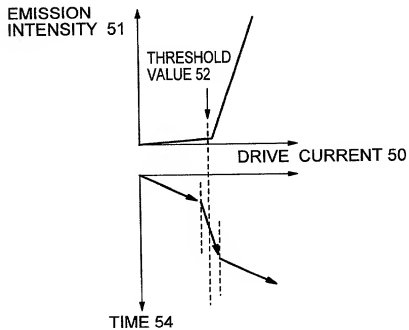


FIG. 11

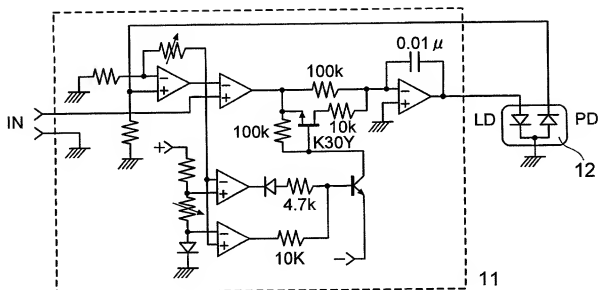


FIG. 12

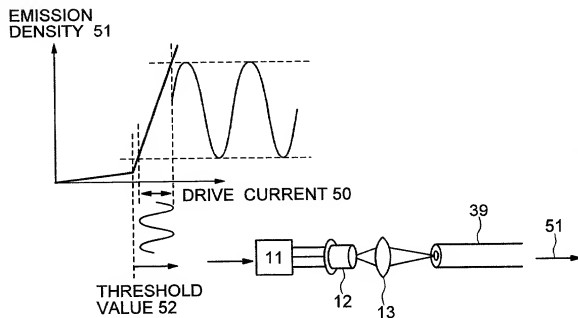


FIG. 13

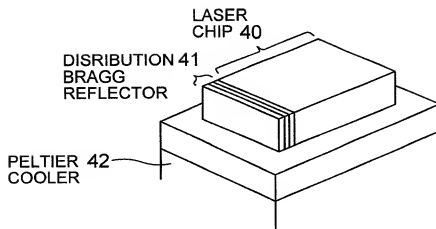
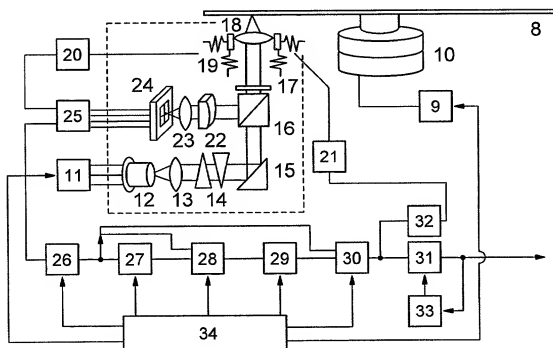


FIG. 14



82 OPTICAL  
HEAD  
CY MOVABLE PART

The diagram illustrates a quantum communication system with 37 numbered components. A dashed box encloses a central optical setup. At the top, a fiber (18) is connected to a beam splitter (17) via a coupler (19). A cylindrical component (10) is connected to a beam splitter (16) via a fiber (9). The central dashed box contains a series of optical elements: a beam splitter (24) followed by lenses (23, 22), a beam splitter (38), and a series of lenses (36, 13, 14). Below these are two more beam splitters (15, 16) and a series of lenses (12, 13, 35, 14). The system includes several input and output ports: 20, 25, 37, 11, 26, 27, 28, 29, 30, 32, 31, 33, and 34. A fiber (18) is also connected to a beam splitter (17) via a coupler (19). The system is labeled with the number 8 in the top right corner.



FIG. 17A

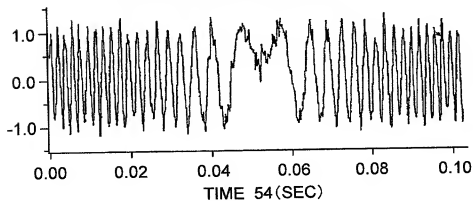
REFLECTION LIGHT INTENSITY 55  
(ARBITRARY INTENSITY)

FIG. 17B

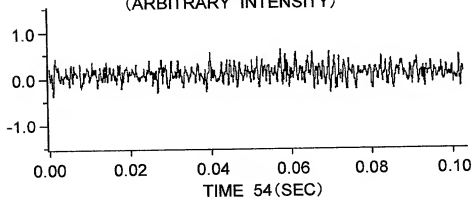
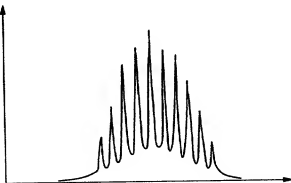
REFLECTION LIGHT INTENSITY 55  
(ARBITRARY INTENSITY)

FIG. 18

EMISSION  
INTENSITY 51WAVELENGTH  $\lambda$  53

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